

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.-2. (Cancelled)

3. (Previously Presented) A point diffraction interferometer which measures a surface profile of a surface to be measured by, irradiating a light from a light source to a pinhole mirror via a collective optical system, irradiating a part of the light diffracted from a pinhole provided in the pinhole mirror to said surface to be measured as a luminous flux for measurement, making said luminous flux for measurement reflected by the surface to be measured interfere with a reference luminous flux which is an other part of the light diffracted from said pinhole, and detecting the state of an interference fringe caused by the interference,

wherein the light irradiated onto said pinhole is an elliptically polarized light that satisfies the following condition:

$$0.5 < \varepsilon < 2,$$

wherein ε is an ellipticity represented as a ratio of a minor axis to a major axis.

4.-11. (Cancelled)

12. (Previously Presented) A manufacturing method for a reflecting mirror in which a multilayer film is formed by alternately laminating a heavy element layer and a light element layer on a substrate, comprising:

measuring a surface profile, using the point diffraction interferometer according to claim 3.

13.-18. (Cancelled)